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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,259	07/18/2003	Steven Michael Hausman	2002P20760US01	3269

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Siemens Corporation  
Intellectual Property Department  
170 Wood Avenue South  
Iselin, NJ 08830

EXAMINER
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HASSAN, AURANGZEB

ART UNIT	PAPER NUMBER
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2182

MAIL DATE	DELIVERY MODE
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10/19/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/622,259	<b>Applicant(s)</b> HAUSMAN ET AL.	
	<b>Examiner</b> Aurangzeb Hassan	<b>Art Unit</b> 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 July 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

#### **Examiner has provided a summary in order to better follow the rejection.**

***Claims 1 – 9, 11, 12, 14 – 22 and 26 – 28*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas et al (US Patent Number 5,649,001 hereinafter "Thomas") in view of Boggs et al (US Publication Number 2001/0037491 hereinafter "Boggs").

***Claim 10*** is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Boggs further in view of Cisco Systems.

***Claims 13 and 29*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Boggs further in view of Rostoker et al. (US Patent Number 6,978,319)

***Claims 23 – 25 and 30 – 32*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Boggs further in view of Al-Ali (US Publication Number 2003/0167391).

(***Emphasis has been added*** to claim limitations that recite terminology that require the ability to carry out a certain function, however the claim limitations do not necessitate that the function be completed, *i.e.* the terms ***couplable*** and ***connectable*** do not necessitate a coupling or connection but merely recite the ability to be coupled or connected.)

2. **Claims 1 – 9, 11, 12, 14 – 22 and 26 – 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas et al (US Patent Number 5,649,001 hereinafter "Thomas") in view of Boggs et al (US Publication Number 2001/0037491 hereinafter "Boggs").**

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3. As per claim 1, Thomas teaches a system comprising: a cellular telephone modem (cellular phone system, column 3, lines 8 – 15); and a programmable cable (communication adapter cable, element 22, figure 1) comprising a first end **connectable** to a computer (communication interface device, element 20, figure 1) and a second end **connectable** to said cellular telephone modem (communication network/device, element 28, figure 1, cellular phone system, column 3, lines 8 – 15); said programmable cable adapted to store at least one of a plurality of configuration parameters comprising a PIN number (identification code, column 6, lines 15 – 20); said programmable cable adapted to, in an operative embodiment, automatically configure said cellular telephone modem by communicating at least one of the configuration parameters to said cellular telephone modem (column 6, lines 15 – 25 and lines 38 – 46).

Thomas fails to specify the type of computer as being a PLC and a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode switch parameter adapted to cause a mode switch of said programmable cable (PLC attached to cable, paragraph [0331]) **connectable** to a programmable logic controller (PLC) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268] describe switching between the two modes).

It would have been obvious to one of ordinary skill in the art to combine the above teachings with Boggs. One of ordinary skill in the art would be motivated to

make such modifications in order to provide higher performance in communications (paragraph [0027]).

The examiner notes that the applicant in the specification background, paragraph 2, lines 1 and 2, states that a PLC is a type of **computer** (emphasis added) utilized in control systems.

4. As per claim 2, Thomas teaches a device comprising: a programmable cable (communication adapter cable, element 22, figure 1) comprising a first end **connectable** to a PLC (communication interface device, element 20, figure 1) and a second end **connectable** to a network communications device (communication network/device, element 28, figure 1), the network communications device further **couplable** to a user interface device (cellular phone system, column 3, lines 8 – 15); said programmable cable adapted to store at least one of a plurality of configuration parameters; in an operative embodiment, said programmable cable adapted to automatically configure the network communications device by communicating at least one of a plurality of configuration parameters to the network communications device comprising a PIN number (communication adapter cable identification code stored on communication adapter cable, column 10, lines 47 – 59).

Thomas does not disclose a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode switch parameter adapted to cause a mode switch of said programmable cable (PLC

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attached to cable, paragraph [0331]) **connectable** to a programmable logic controller (PLC) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268] describe switching between the two modes).

It would have been obvious to combine Thomas and Boggs for the same reason discussed in claim 1.

5. As per claims 9, Thomas teaches a device comprising: a programmable cable comprising, a first end **connectable** to a network (**couplable** to a PLC), and a second end **connectable** to a network communications device (communication network/device, element 28, figure 1); the network communications device further **couplable** to a user interface device (cellular phone system, column 3, lines 8 – 15); and said programmable cable programmable to store at least one of a plurality of configuration parameters comprising: a communication language (adapt the modem to a particular country's telephone network, column 1, lines 63 – 67, column 3, lines 1 – 2) and an identifying PIN number (communication adapter cable identification code stored on communication adapter cable, column 10, lines 47 – 59, emphasis added).

Thomas does not disclose a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode switch parameter adapted to cause a mode switch of said programmable cable (cable, paragraph [0331]) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268] describe switching between the two modes).

It would have been obvious to combine Thomas and Boggs for the same reason discussed in claim 1.

The Examiner asserts that the claim limitations only require the capability to communicate to the PLC but do not necessitate such limitations. Accordingly the programmable cable of Thomas communicates with a computer and network.

6. As per claim 14, Thomas teaches a method comprising the activities of: providing a programmable cable comprising a first end and a second end, the first end **connectable** to a PLC (communication interface device, element 20, figure 1), the second end **connectable** to a cellular telephone modem (communication network/device, element 28, figure 1), a user interface device **couplable** to a network comprising the programmable cable, the PLC, and the cellular telephone modem (cellular phone system, column 3, lines 8 – 15); said programmable cable adapted to store at least one of a plurality of configuration parameters (communication adapter cable identification code stored on communication adapter cable, column 10, lines 47 – 59); and automatically configuring the cellular telephone modem by the programmable cable (handshaking and connectivity via communication interface device upon automatic verification of the identification code, column 6, lines 15 – 48).

Thomas does not disclose a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode switch parameter adapted to cause a mode switch of said programmable cable (cable,

paragraph [0331]) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268] describe switching between the two modes).

It would have been obvious to combine Thomas and Boggs for the same reason discussed in claim 1.

7. As per claim 26, Thomas teaches a method comprising the activities of: providing a programmable cable comprising a first end **connectable** to a network (communication interface device, element 20, figure 1) and a second end **connectable** to a network communications device (communication network/device, element 28, figure 1), a user interface device **couplable** to a network (cellular phone system, column 3, lines 8 – 15); and automatically communicating from the programmable cable to the network communicating device a PIN number and at least one of a plurality of configuration parameters (handshaking and connectivity via communication interface device upon automatic verification of the identification code, column 6, lines 15 – 48, communication adapter cable identification code stored on communication adapter cable in use for cellular telephone network, column 10, lines 47 – 59).

Thomas does not disclose a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode switch parameter adapted to cause a mode switch of said programmable cable (cable, paragraph [0331]) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268] describe switching between the two modes).



It would have been obvious to combine Thomas and Boggs for the same reason discussed in claim 1.

The Examiner elaborates that Thomas teaches a programmable cable **couplable** to a network. Thomas teaches a general network and as the claim limitations stand in claim 26, the term **couplable** does not necessitate all the proceeding elements but rather puts forth a capability to be coupled to such a network. As claim 26 is a method the claim limitation **couplable** does not necessitate the particular network comprising particular network elements but rather necessitates the capability of coupling to a network in general which is Thomas' cellular phone system.

8. Thomas modified by the teachings of Boggs as applied in claim 2 above as per claims 3, 4, 6 – 8, Thomas teaches a device wherein the network interface device comprises a multitude of end interfaces (cellular phone system: column 3, lines 8 – 15; telephone network: column 1, lines 65 – 67, column 2 lines 1 – 2; network and Internet: column 8, lines 42 – 59; cellular phone system: column 3, lines 8 – 15).

9. Thomas modified by the teachings of Boggs as applied in claim 2 above as per claim 5, Thomas teaches a device wherein the configuration parameters further comprise a setup string for the network interface device (column 8, lines 45 – 58).

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10. As per claim 11, Thomas teaches a device wherein in an operative embodiment, said programmable cable adapted to automatically configure the network communications device by communicating at least one of the plurality of configuration parameters to the network communications device (column 8, lines 45 – 58).

11. As per claim 12, Thomas teaches a device wherein said second end of said programmable cable comprises an RS232 network connector (communication over an RS232 serial port, column 1, lines 31 – 37).

12. Thomas modified by the teachings of Boggs as applied in claim 14 above as per claims 15 and 16, Thomas teaches a method wherein said automatically configuring activity occurs during/after a power-cycling of the programmable cable (power-cycling through connection and interchanging of adapter cables and automatically configuring through periodic polling, column 4, lines 17 – 63).

13. Thomas modified by the teachings of Boggs as applied in claim 14 above as per claim 17, Thomas teaches a method comprising automatically communicating, from the programmable cable to the network communications device at least one of the plurality of configuration parameters (column 8, lines 42 – 59).

14. As per claims 18 and 27, Thomas teaches a method comprising: via the user interface device through the network, setting at least one of the plurality of

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programmable cable configuration parameters comprising a communication language (adapt the modem to a particular country's telephone network, column 1, lines 63 – 67, column 3, lines 1 – 2) and an identifying PIN number (communication adapter cable identification code stored on communication adapter cable, column 10, lines 47 – 59).

Boggs teaches said programmable cable programmable to store **at least one** of a plurality of configuration parameters comprising: a mode of operation, a PPI protocol, and a data transfer speed (PPI, mode, and baud rates, paragraph [0251]).

*(Emphasis added)*

15. Thomas modified by the teachings of Boggs as applied in claim 14 above as per claims 19 – 21, Thomas teaches a method further comprising initializing the programmable cable using the user interface device through the network by setting at least one of the plurality of configuration parameters comprising a network communications device setup string and a PIN number (communication adapter cable identification code stored on communication adapter cable, column 10, lines 47 – 59).

16. Thomas modified by the teachings of Boggs as applied in claim 14 above as per claim 22, Thomas teaches a method wherein said activity of automatically configuring the cellular telephone modem by the programmable cable further comprises communicating at least one of a plurality of configuration parameters, comprising cellular telephone modem setup string and a PIN number, to the cellular telephone modem (handshaking and connectivity via communication interface device upon

automatic verification of the identification code, column 6, lines 15 – 48, communication adapter cable identification code stored on communication adapter cable in use for cellular telephone network, column 10, lines 47 – 59).

17. As per claim 28, Thomas teaches a method wherein the configuration parameters communicated to the network communications device further comprise a network communications device setup string (column 8, lines 45 – 58).

**18. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Boggs further in view of Cisco Systems.**

19. Thomas modified by the teachings of Boggs and Cisco as applied to claim 9 above, as per claim 10, Thomas teaches a device comprising: a programmable cable comprising, a first end **connectable** to a network (**couplable** to a PLC), and a second end **connectable** to a network communications device (communication network/device, element 28, figure 1, emphasis added)

Thomas in view of Boggs does not explicitly teach token holding.

Cisco teaches a device wherein said programmable cable further adapted to, in an operative configuration, serve as a token holding master on the network adapted to multiplex networked communications with the PLC (each station holding token, Section: Token Ring Operation).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Thomas and Boggs with the above teachings of Cisco Systems. One of ordinary skill in the art would have been motivated to make such modification in order to allow reduce collisions of data on network (Section: Review Questions).

**20. Claims 13 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Boggs further in view of Rostoker et al. (US Patent Number 6,978,319).**

21. As per claim 13, Thomas teaches a device wherein said second end of said programmable cable comprises a connector (can be utilized with wide variety of communication protocols and a variety of networks, column 3, lines 47 – 54).

Thomas fails to teach a connector that which comprises a USB network connector.

Rostoker et al. analogously teaches a device wherein said second end of said programmable cable comprises a connector comprising a USB network connector (column 5, lines 4 – 11).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Thomas and Boggs with the above teachings of Rostoker et al. One of ordinary skill in the art would have been motivated

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to make such modification in order to allow for "plug-and-play" further allowing transparency on the user end (column 2, lines 63 – 67).

22. Thomas modified by Boggs further modified by the teachings of Rostoker et al. as applied to claim 13 above, as per claim 29, Rostoker et al. teaches a method further comprising monitoring data traffic through the programmable cable using a set of status indicators (status of data present through protocols where the controller notes indication, figure 8).

**23. Claims 23 – 25 and 30 – 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Boggs further in view of Al-Ali (US Publication Number 2003/0167391).**

24. As per claims 23 – 25 and 30 – 32, the combination of Thomas and Boggs teaches a method further comprising communications between the user interface device and the PLC (Thomas: computer, column 3, lines 47 – 54; Boggs: PLC paragraph [0331]), between the programmable cable and the PLC and between the programmable cable and the user interface device (Thomas: figure 1).

The combination of Thomas and Boggs fails to explicitly teach the limitation of encryption along the communication lines lying therein between.

Al-Ali teaches analogously a method comprising encryption along a cable communicating between interfaces (encryption interface cable, element 700, figure 6).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Thomas and Boggs with the above teachings of Al-Ali. One of ordinary skill in the art would have been motivated to make such modification in order to allow for exclusive compatibility between interfaces without the necessity of hardware modifications (paragraph [0027]).

### ***Examiner's Note***

25. Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

### ***Response to Arguments***

26. Applicant's arguments filed 7/19/07 have been fully considered but they are not persuasive. Applicant argues: Boggs does not teach "said programmable cable adapted to store", "a plurality of configuration parameters", that comprise "a mode switch parameter adapted to cause a mode switch of said programmable cable to select between a Freeport mode and a PPI mode".

27. As per the Applicant's arguments, the Examiner respectfully disagrees. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In reference to the limitations argued by the Applicant, the Examiner notes that Boggs is relied upon for a Freeport mode and PPI mode. As cited in the previous action Boggs teaches a switching of a Freeport PPI mode in paragraph [0068]<sup>268 AK</sup>, which provides a detailed description of step S3012 of figure 30a that shows a switching of a Freeport - PPI mode. As best understood by the specification of the current application, paragraphs [0011-0013], a Freeport mode is a variation of a first PPI and second PPI protocol. Teachings of a programmable cable are relied upon from Thomas. Clearly one of ordinary skill in the art would recognize that Boggs teaches a mode switching of Freeport PPI mode.

### ***Conclusion***

28. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the



shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aurangzeb Hassan whose telephone number is (571) 272-8625. The examiner can normally be reached on Monday - Friday 9 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AH



10/15/07